

## CLAIMS

We claim:

- 1 1. A method for communicating area information in a common framework,  
2 comprising the steps of:  
3 providing a first set of instructions which generates an area of interest  
4 (AOI) defined by a first geometric shape;  
5 defining the first geometric shape by one or more coordinates;  
6 converting the one or more coordinates to a second set of coordinates for  
7 use with a second set of instructions different than the first set of instructions,  
8 wherein the second set of coordinates is defined by a new AOI which  
9 includes information associated with the first set of instructions and which is  
10 interpreted by the second set of instructions.
- 1 2. The method of claim 1, wherein the new AOI associated with second set of  
2 instructions define a second geometric shape.
- 1 3. The method of claim 2, wherein the first geometric shape is a same shape as  
2 the second geometric shape.
- 1 4. The method of claim 2, wherein the first geometric shape is different than the  
2 second geometric shape.
- 1 5. The method of claim 4, wherein the first geometric shape is more constrained  
2 than the second geometric shape.
- 1 6. The method of claim 2, wherein the first and the second geometric shape is  
2 one of a bounding box, a parallelogram, a rectangle and a polygon.

- 1 7. The method of claim 6, wherein the bounding box is more constrained than  
2 the parallelogram, the rectangle and the polygon.
- 1 8. The method of claim 2, wherein the one or more coordinates and the second  
2 set of coordinates are at least one point which defines the first geometric shape  
3 and the second geometric shape, respectively.
- 1 9. The method of claim 2, further comprising the step of rotating the second  
2 geometric shape by a predetermined amount compared to the first geometric  
3 shape.
- 1 10. The method of claim 9, wherein the step of rotating is performed about an  
2 origin (0,0).
- 1 11. The method of claim 2, further comprising the step of translating the second  
2 geometric shape by a predetermined amount compared to the first geometric  
3 shape.
- 1 12. The method of claim 2, further comprising the step of scaling the second  
2 geometric shape by a predetermined amount compared to the first geometric  
3 shape.
- 1 13. The method of claim 12, wherein the step of scaling is performed in at least  
2 one of a vertical (Y) and horizontal direction (X).
- 1 14. The method of claim 2, further comprising the step of mirroring points of  
2 the second geometric shape by a predetermined amount compared to the first  
3 geometric shape about one of a horizontal and vertical axis.

1 15. The method of claim 2, further comprising the step of orienting the second  
2 geometric shape differently than the first geometric shape.

1 16. The method of claim 2, wherein the step of defining the first geometric  
2 shape includes the steps of determining whether the first geometric shape  
3 includes one of:

- 4 (i) at least three points;
- 5 (ii) a distinct starting point, fast end point and a slow end point;
- 6 (iii) a non-zero distance between a starting point and a fast end point;
- 7 and
- 8 (iv) a non zero area.

1 17. The method of claim 16, wherein after the determination of the first  
2 geometric shape, the method includes the steps of providing:

- 3 (i) the at least three points used to define a polygon;
- 4 (ii) the distinct starting point, fast end point and a slow end point used to  
5 define a parallelogram;
- 6 (iii) the non-zero distance between the starting point and the fast end  
7 point used to define a rectangle; and
- 8 (iv) the non zero area used to define a bounding box.

1 18. The method of claim 17, wherein after the determination that there are the  
2 at least three points, the method further comprises the steps of:

- 3 determining whether there are any crossovers;
- 4 if there are no crossover then copying polygon information to the AOI;
- 5 and
- 6 setting a current AOI to the polygon.

1 19. The method of claim 17, wherein after the determination that there are the  
2 distinct starting point, fast end point and slow end point, the method further  
3 comprises the steps of:

4 converting parallelogram information to a temporary polygon;  
5 copying the temporary polygon to an AOI initial polygon;  
6 setting an AOI initial style to "parallelogram";  
7 copying from the temporary polygon to an AOI current polygon; and  
8 setting an AOI current style to the "parallelogram".

1 20. The method of claim 17, wherein after the determination that there is the  
2 non-zero distance, the method further comprising the steps of:

3 determining whether the slow length is greater than 0;  
4 if the slow length is greater than 0, converting a rectangle to a temporary  
5 polygon;  
6 copying the temporary polygon to an AOI initial polygon;  
7 setting an AOI initial style to "rectangle";  
8 copying the temporary polygon to an AOI current polygon; and  
9 setting the rectangle in an AOI current style to the "rectangle".

1 21. The method of claim 17, wherein after the determination that there is the  
2 non-zero area, the method comprising:

3 converting bounding box information to a temporary polygon;  
4 copy the temporary polygon to an AOI initial polygon;  
5 setting an AOI initial style to "bounding box";  
6 copying the temporary polygon to an AOI current polygon; and  
7 setting an AOI current style to the "bounding box".

1 22. A method for communicating area information in a common framework,  
2 comprising the steps of:

3 filling a handle with an initial area of interest (AOI) space associated  
4 with a first set of instructions;  
5 defining a geometric shape associated with the initial AOI;  
6 converting the initial AOI space to a second AOI space associated with a  
7 second set of instructions; and  
8 accessing the second AOI space with the second set of instructions.

1 23. The method of claim 22, wherein the second AOI space has the same or  
2 more constrained than the initial AOI space.

1 24. A system for communicating area information in a common framework,  
2 comprising:  
3 means for providing a first set of instructions which generate an area of  
4 information (AOI) and which is defined by a first geometric shape;  
5 means for defining the first geometric shape by one or more coordinates;  
6 and  
7 means for converting the one or more coordinates associated with the  
8 first geometric shape to a second set of coordinates for use with a second set of  
9 instructions, wherein  
10 the second set of instructions are different than the first set of  
11 instructions, and  
12 the second set of coordinates further generate the AOI which includes  
13 information associated with the first set of instructions capable of being  
14 interpreted by the second set of instructions.

1 25. A machine readable medium containing code communicating area  
2 information in a common framework, comprising the steps of:  
3 providing a first set of instructions which generate an area of information  
4 (AOI) and which is defined by a first geometric shape;

5           defining the first geometric shape by one or more coordinates; and  
6           converting the one or more coordinates associated with the first  
7   geometric shape to a second set of coordinates for use with a second set of  
8   instructions, wherein  
9           the second set of instructions are different than the first set of  
10   instructions, and  
11          the second set of coordinates further generate the AOI which includes  
12   information associated with the first set of instructions capable of being  
13   interpreted by the second set of instructions.